



Hazardous Materials Investigation Report

Gravina Access Project

Ketchikan, Alaska

September 2002

Introduction

HDR conducted a preliminary investigation to characterize the potential for occurrences of hazardous wastes and environmental contamination at the proposed locations of the Gravina Access Project Alternatives C3(a), C3(b), C4, D1, F1, F3, G2, G3, and G4. Federal and state databases identifying hazardous waste and other contaminated sites were reviewed to determine if any such sites occur within or adjacent to the construction rights-of-way of the nine project alternatives. The database search reviewed sites regulated by the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); state listed spill sites and contaminated sites; and sites with leaking underground storage tanks. A reconnaissance survey of the proposed construction areas was made to characterize land use and possible sources of contamination. Pathways of migration of potential contaminants were also observed.

This memorandum describes the general land uses of the areas potentially affected by the project alternatives, identifies known hazardous waste and other contaminated sites within or adjacent to the construction rights-of-way, and identifies those areas where further characterization is necessary to determine the potential for encountering hazardous materials and wastes during project construction.

Existing Land Use Within Alternative Rights-of-Way

The following paragraphs characterize the existing land use within the construction rights-of-way for the nine alternatives.

Alternative C3(a) would begin on Revillagigedo Island at the intersection of Tongass Avenue and Signal Road. At this intersection, the proposed alignment would be located directly south of a commercial bank and directly north of a car dealership. Construction right-of-way would be required within both the bank and car dealership properties. From Tongass Avenue, the alternative would gain elevation along the hillside parallel to Tongass Avenue, uphill from small residential properties. Most of the hillside area within the construction right-of-way is undeveloped. Alternative C3(a) would cross Tongass Avenue on piers that, based on preliminary engineering, would require pier placement in the vicinity of a residence on Tongass Avenue. On Gravina Island, the alternative would be constructed mostly on fill within the airport's aviation lands (i.e., portions of the airport property designated for use directly related to the aviation facilities) and would traverse undeveloped land within the airport reserve property.

The alignment of **Alternative C3(b)** would follow the same general alignment as C3(a), except where it would cross Tongass Avenue and Tongass Narrows. The land uses along the alignment for C3(b) would be the same as described for C3(a); however, C3(b) would not directly affect residential properties on Tongass Avenue.

Alternative C4 would intersect Tongass Avenue near residential properties south of the Ketchikan Redi-mix Quarry. It would climb the hillside to the north, traversing the quarry property parallel to Tongass Avenue. A construction staging area with construction waste (rusty metal, lumber, 55-gallon drums) is located adjacent



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to the proposed alignment. Alternative C4 would cross Tongass Avenue in an area that is undeveloped. On Gravina Island, Alternative C4 would follow the same alignment as Alternatives C3(a/b).

Alternative D1 would intersect Tongass Avenue near residential properties south of the Ketchikan Redi-mix Quarry. It would climb the hillside to the north, arcing through the quarry property before crossing Tongass Avenue. Alternative D1 would cross the construction staging area with construction waste (rusted metal, lumber, 55-gallon drums) on the quarry property. It would cross Tongass Avenue in an area that is undeveloped. On Gravina Island, Alternative D1 would follow the same alignment as Alternatives C3(a/b) and C4.

Alternative F1 would intersect Tongass Avenue just south of Tatsuda's grocery store and climb the undeveloped hillside east of the tank farm, cemetery, and U.S. Coast Guard (USCG) station. The alignment would skirt the southern end of the USCG property before crossing Tongass Avenue and the East Channel. The proposed alignment would traverse undeveloped areas on Pennock Island and on Gravina Island before entering the airport's aviation lands.

Alternative F3 would intersect Tongass Avenue south of the USCG station in an area that is undeveloped. The proposed alignment would traverse undeveloped areas on Pennock Island and on Gravina Island before entering the airport's aviation lands.

Alternative G2 would involve construction of a ferry terminal and parking facilities on Peninsula Point in the vicinity of a Pro Mech aircraft hangar and other disturbed lands. The ferry terminal and parking facilities on Gravina Island would be located on currently undeveloped land in the vicinity of Lewis Point. The access road would traverse undeveloped land before reaching the airport's aviation lands.

Alternative G3 would involve construction of a ferry terminal and parking facilities in a commercial area of downtown Ketchikan. The site is currently occupied by a fast-food restaurant. The ferry terminal and parking facilities on Gravina Island would be located on currently undeveloped land. The access road would traverse undeveloped land before reaching the airport's aviation lands.

Alternative G4 would involve construction of a ferry terminal and parking facilities adjacent to the existing airport ferry terminals on both Revillagigedo and Gravina islands. The waterfront on Revillagigedo Island in the vicinity of the proposed new ferry terminal is used for commercial and industrial activities. The ferry terminal and parking facilities on Gravina Island would be located adjacent to the existing airport facilities. The roadway alignment would follow the shoreline south of the ferry terminal, wrap around the southern end of the airport runway, and follow the alignment of alternatives C3(a/b), C4, and D1 to airport development land.

Results of Database Search

Based on a review of federal and state databases, there are three known contaminated properties and two Leaking Underground Storage Tank (LUST) sites that are within the areas potentially affected by the project alternatives. These sites are identified in the Alaska Department of Environmental Conservation's Statewide Contaminated Sites Database¹ and LUST Program Database². Table 1 provides a list of these sites and the status of their cleanup.

¹ADEC, *Contaminated Sites Database FOIA Report*, August 30, 2002

²ADEC, LUST Program Database, from website: <http://www.state.ak.us/local/akpages/ENV.CONSERV/dspar/stp/search.htm>



TABLE 1
KNOWN CONTAMINATED SITES

<i>Site Name and Location</i>	<i>Problem</i>	<i>Cleanup Status; Priority</i>
<u>Statewide Contaminated Sites Database</u>		
USCG Station (1 mile South Tongass Highway)	Petroleum contamination in soils due to overfilling of aboveground storage tank (AST) and underground storage tank (UST) on north side of barracks and leaking fuel lines between the two; unknown quantity; gasoline-range organics (GRO), metals, and polychlorinated biphenyls (PCBs) in soils	Active; Medium
	Diesel contamination in soils from heating oil tank in CO's Quarters	Active; Low
	Lead (35,000 milligrams per kilogram [mg/kg]) and petroleum product (127 mg/liter [mg/L]) in soil at firing range (active from ~1960 to 1995)	Active; High
Ketchikan Tank Farm (1100 Stedman Street)	Petroleum contamination in soil and groundwater; unknown quantity	Inactive; Low
Bailey Power Plant (Tongass Avenue near airport ferry dock)	Diesel contamination in soil from buried fuel line leak; unknown quantity	Inactive; Medium
<u>LUST Program Database</u>		
Ketchikan International Airport	Confirmed release in May 1999; no details in database	Information not available
USCG = U.S. Coast Guard; mg/liter = milligrams/liter.		
Sources: ADEC Contaminated Sites Database, August 2002; ADEC LUST Program Database, August 2002.		

There are no CERLA sites within or adjacent to the construction right-of-way of any of the project alternatives. The database search for RCRA-permitted sites identified eight sites that could affect construction of an alternative because a release of hazardous materials from the site could migrate to the project construction area. These sites and their permit status are provided in Table 2.



TABLE 2
RCRA PERMITTED SITES

<i>Facility Name and Location</i>	<i>RCRA Permit Number</i>	<i>Potentially Affected Alternative</i>	<i>Inspection History</i>	<i>Significant Non-compliance or High Priority Violator?</i>
Taquan Air Service Inc. 1500 Airport Way Hangar 1)	AKR000004580	All Build Alternatives	No record	No
Petro Marine Services Ketchikan Ketchikan International Airport	AKD000834846	All Build Alternatives	8/2000	No
Pro Mech Inc. Ketchikan International Airport	AKD983075615	All Build Alternatives	No Record	No
Alaska Airlines Ketchikan 1200 Airport Terminal Building)	AKD983069592	All Build Alternatives	No Record	No
South Coast Inc. 4049 Tongass Avenue	AK0001005297	Alternative C4	No Record	No
City of Ketchikan Landfill 1100 Nordstrom Drive	AKD983075979	Alternative F1	No Record	No
USCG Integrated Support Command 1300 Stedman Street	AK8690360492	Alternative F1	8/2000	No
Temsco Helicopter 5411 North Tongass Highway	AKD983076407	Alternative G2	8/2000	No

Source: EPA Region 10, Enforcement and Compliance On Line Database:
<http://yosemite.epa.gov/R10/ENFORCE.NSF/webpage/EC-On-Line>

Recommendations for Further Study

The following paragraphs identify properties where further investigation is recommended to determine whether hazardous wastes are present, relative to each of the alternatives. For all alternatives, further investigation of the airport property is recommended to characterize hazardous materials transport, storage, use, and disposal practices, and to identify potential releases of hazardous wastes. Sites recommended for further study would be subject to a Phase I Hazardous Waste Site Investigation in accordance with the guidelines of the American Society for Testing and Materials (ASTM E1527-00, 2000) and would include interviews with property owners, a review of historical documents, agency consultation, and site inspection. There are no known or suspected contaminants or documented contaminated sites within Tongass Narrows; therefore, locations of the offshore in-water structures are not a concern with respect to hazardous wastes.

Alternatives C3(a) and C3(b): Further investigation is recommended to characterize the hazardous waste potential of the car dealership on the south corner of the Tongass Avenue–Signal Road intersection. Previous use of the property may have involved the use of hazardous materials and/or the generation of hazardous wastes. Current practices at the car dealership (e.g., vehicle maintenance and repair) should also be



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investigated to characterize the likelihood of a release of hazardous wastes (e.g., solvents, used oil, battery fluids) to the environment.

Alternatives C4 and D1: Further investigation is recommended to characterize the hazardous waste potential of the quarry site and associated construction staging area. A site inspection would be useful in determining whether hazardous wastes have been released to the environment from the 55-gallon drums and metal parts stored at the construction staging area. Data pertaining to the South Coast Inc. RCRA permit indicate there are no compliance issues associated with the site; however, there are no reported inspections of the site with respect to permit compliance. Further investigation of the site (i.e., Phase I) should be conducted if Alternative C4 is selected.

Alternative F1: In addition to the airport property, further investigation of potential hazardous wastes should be conducted at the USCG property. Although the known contaminated sites at the USCG facility are undergoing an active cleanup program, further investigation of the area of the USCG property to be traversed by the alternative alignment should be completed if Alternative F1 is selected. The Ketchikan City Landfill is also a potential source of contamination for Alternative F1. Because the landfill is located upgradient from the proposed Alternative F1 alignment, further investigation of this facility should be conducted to ensure that there are no contaminants migrating offsite into the area proposed for construction of Alternative F1, if Alternative F1 is selected.

Alternative F3: None of the properties traversed by this alignment, other than the airport property, indicates the need for further investigation of potential hazardous wastes.

Alternative G2: The Pro Mech hangar and Temsco Helicopter facility at Peninsula Point should be further investigated to determine whether hazardous wastes have been released from the site. Past and current practices involving aircraft maintenance likely involve the use of hazardous materials and disposal of hazardous wastes, some of which may have been released to the environment. Areas previously disturbed (cleared and filled) should also be further investigated.

Alternative G3: The site of the ferry terminal on Revillagigedo Island is in a commercial area of downtown Ketchikan that could have been used for activities requiring the use of hazardous materials and/or the generation and disposal of hazardous wastes. Further investigation of this site is required to determine whether past uses of the site could have resulted in the release of hazardous wastes to the environment.

Alternative G4: The location of the G4 ferry terminal adjacent to the existing airport ferry terminal could have been used for activities requiring the use of hazardous materials and/or the generation and disposal of hazardous wastes. Further investigation of this site is required to determine whether past uses of the site could have resulted in the release of hazardous wastes to the environment.

Conclusion

All of the alternatives would involve construction within the airport property (aviation and airport reserve lands). The airport property should be investigated further to characterize the potential for the presence of hazardous wastes in the soil, groundwater, surface water, and air, particularly in those areas where construction could occur. No other properties on Gravina Island have been identified as areas requiring further investigation for hazardous waste potential.

The following properties on Revillagigedo Island are recommended for further investigation with respect to potential hazardous waste occurrences:



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- The bank property on the south corner of the Tongass Avenue–Signal Road intersection [Alternatives C3(a) and (b)]
- The quarry site and associated construction staging area (Alternatives C4 and D1)
- The South Coast property (Alternative C4)
- The Ketchikan City Landfill and USCG Station (Alternative F1)
- The Pro Mech hangar and Temsco Helicopter facility on Peninsula Point (Alternative G2)
- The commercial/industrial areas proposed as ferry terminal sites for Alternatives G3 and G4